## REMARKS

Claims 2-8, 11-19, 21-27, 32-37 and 41-43 are pending in the application.

Claims 2-8, 11-19 and 21-26 are objected to.

Claims 2-8, 11-19, 21-27, 32-37 and 41-43 are rejected under 35 U.S.C. 103(a).

Claims 4, 6-8 and 27 are amended.

No matter is added.

Applicants request reconsideration and allowance of the claims in light of the above amendments and following remarks.

## Claim Objections

The Final Office Action objects to claims 2-8, 11-19 and 21-26 because the claims "have independent claim numbers that are larger than some dependent claim numbers."

For reasons presented at page 9, lines 17-28 of Applicants' response filed April 16, 2007, the fact that certain claims "have independent claim numbers ... [which] are larger than some dependent claim numbers" is not an informality. Absent any evidentiary basis that claims cannot be amended to depend from other claims with larger claim numbers, Applicants respectfully request withdrawal of the present objection to the claims.

## Claim Rejections – 35 U.S.C. § 103

The Final Office Action rejected claims 2-8 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,132,512 issued to Horie et al. (hereinafter "Horie").

Amended claim 8 recites, among other elements, "wherein a gap exists between central regions of adjacent ones of the circular plates, wherein a gas path included one of the circular plates and a gas path included in another of the plates are in fluid communication with each other via the gap, and wherein a lowermost one of the circular plates includes cooling lines, coolant inlets, and coolant outlets, each of the cooling lines connecting one of the coolant inlets to one of the coolant outlets." Support for this amendment can be found at, for example, FIG. 1 of the specification as originally filed. Horie fails to teach or suggest at least these features as now recited in claim 8.

For example, FIG. 12B of Horie illustrates wherein disk 31 is spaced apart from disk 32 by disk 30. While a portion of the material gas passage C extends through disk 30 (disposed

between disks 31 and 32), such a portion of the material gas passage C does not constitute a gap between disks 31 and 32 because such a portion of the material gas passage C is only present between other portions of the material gas passage C extending through disks 31 and 32. For at least these reasons, Applicants respectfully submit that claim 8 is not rendered obvious by Horie.

Further, the heating liquid medium passage B' shown in FIGS. 12B and 12C of Horie are formed in the disk 30 – not in disk 32, which is the lowermost of the disks in the head body 20. For at least this additional reason, Applicants respectfully submit that claim 8 is not rendered obvious by Horie.

Claims 2-7 depend from claim 8 and, therefore, include all of the elements recited in claim 8. Accordingly, Horie fails to render claims 2-7 obvious at least by virtue of their dependence from claim 8.

The Final Office Action rejected claims 11-19, 21-27, 32-37 and 41 under 35 U.S.C. 103(a) as being unpatentable over Horie in view of U.S. Patent No. 6,544,380 issued to Tomoyasu et al (hereinafter "Tomoyasu").

Applicants note that Advisory Action maintains the finality of the rejection of claims 11, 12, 16, 19, 27, 34, and 37 stating that "[t]he Examiner has reconsidered his grounds of rejection and believes they should be sustained." Nevertheless, the Examiner has failed to provide any evidence that the substance of the arguments presented in Applicants' previous response was actually considered.

If the present rejection of claims 11, 12, 16, 19, 27, 34, and 37 is to be maintained, Applicants respectfully request the substance of each and every argument presented in Applicants' previous response be answered. Otherwise, Applicants request withdrawal of the present rejection of claims 11, 12, 16, 19, 27, 34, and 37. See M.P.E.P. § 707.07(f).

For purposes of enhancing the clarity of the prosecution record: the rejection of claim 19 was traversed at page 12, line 28-page 14, line 9 of Applicants' previous response; the rejection of claim 11 was traversed at page 14, lines 13-24 of Applicants' previous response; the rejection of claim 12 was traversed at page 14, lines 25-29 of Applicants' previous response; the rejection of claim 16 was traversed at page 14, line 30-page 15, line 3 of Applicants' previous response; the rejection of claim 27 was traversed at page 15, lines 4-6 of Applicants' previous response; the rejection of claim 34 was traversed at page 15, lines 11-13 of Applicants' previous response;

and the rejection of claim 37 was traversed at page 15, lines 14-16 of Applicants' previous response.

Further, amended claim 27 now recites, among other elements, "a shower head ... comprising a plurality of plates having a plurality of gas paths formed therein and a shower head cooling system arranged in a lowermost one of the plurality of plates." Accordingly elements recited in claim 27 are similar to those recited in claim 8. Therefore, arguments presented above traversing the rejection of claim 8 are similarly applicable in traversing the rejection of claim 27.

Final Office Action rejected claims 42 and 43 under 35 U.S.C. 103(a) as being unpatentable over Horie in view of Tomoyasu, and further in view of U.S. Patent No. 4,534,816 issued to Chen et al. (hereinafter "Chen").

Applicants note that Advisory Action maintains the finality of the rejection of claims 42 and 43 stating that "[t]he Examiner has reconsidered his grounds of rejection and believes they should be sustained." Nevertheless, the Examiner has failed to provide any evidence that the substance of the arguments presented in Applicants' previous response was actually considered.

If the present rejection of claims 42 and 43 is to be maintained, Applicants respectfully request the substance of each and every argument presented in Applicants' previous response be answered. Otherwise, Applicants request withdrawal of the present rejection of claims 42 and 43. See M.P.E.P. § 707.07(f).

For purposes of enhancing the clarity of the prosecution record: the rejection of claims 42 and 43 was traversed at page 16, lines 1-19 of Applicants' previous response.

## **CONCLUSION**

For the foregoing reasons, reconsideration and allowance of the pending claims of the application as amended is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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